

most languages, including English, the spelling of a word alone does not supply enough information to instruct a user how the word is pronounced, because there are multiple possible pronunciations for most letters. Linguists describe these languages as having a gap between orthography (i.e., transcription using letters of a standardized alphabet) and pronunciation.

Most dictionaries of languages with a gap between orthography and pronunciation include pronunciation symbols next to the spelling of each word. For example, the on-line version of the Merriam Webster dictionary ([www.webster.com](http://www.webster.com)) utilizes the following pronunciation symbols.

### Pronunciation Symbols

Symbol	Explanation	Symbol	Explanation
ʌ	as a in banana and about, as o in collide	g	as g in go, big, and gift
ʊ, ɔ	as u in humdrum and about	h	as h in hat and ahead
ˌ, ɪ	Immediately preceding ʌ, ɪ, ʊ, ɪ, ɪ, as le in battle, en in kitten and eaten and sometimes open ˌɒp-ˌɪt; immediately following ʌ, ɪ, ʊ, as often le in French table, me in French prisme, and re in French titre	wh	as wh in whale as pronounced by those who do not have the same pronunciation for both <i>whale</i> and <i>wail</i>
ɪr	as ur and er in further, as er in merger, as lr in bird	l	as l in tip, banish, and active
ˌr-ɪ, ˌr-ɪ	as in two different pronunciations of hurry: ˌhɪr-E, ˌhɪr-ɪ	l	as l site, slide, and tripe, as uy in buy
ɪ	as a in mat, map, mad, gag, snap, and patch	j	as j in job and join, as g in gem, as dg in edge, as j and dg in judge
ɪ	as ay in day, as a in fade, date, drape, and cape	k	as k in kin and cook, as che in ache
ɪ	as o in bother and cot and, with most American speakers, as a in father and cart	ˌk_ɪ	as ch in German ich and buch, as ch in one pronunciation of loch
ˌɪ	as a in father as pronounced by speakers who do not rhyme it with <i>bother</i> ; as a in French <i>patte</i>	l	as l in lily and pool
ɪu	as ow in now, as ou in loud and out	m	as m in murmur, dim, and nymph
ɪ	as b in baby and rib	n	as n in no and own
ˌɪ	as ch in chin, in nature ˌnɑ-chɪr	ˌɪ	indicates that preceding vowel or diphthong is pronounced with the nasal passages open, as in French <i>un bon vin blanc</i> ˌœ̃[ˌɪn]-bɔ[ˌɪn]-vɑ[ˌɪn]-blɑ̃[ˌɪn]
ɪ	as e in bet, bed, and peck	ˌɪ	as ng in sing and singer; as n in finger and ink (actually this is a single sound, not two)
ˌɪ, ˌɪ	as ea in beat and easy, as the first e in evenly, as ee in nosebleed	ɔ	as o in bone, as ow in know, as eau in beau
ɪ	as f in fifty and cuff	ɔ	as aw in saw and gnaw, as a in all, as augh in caught
		Symbol	Explanation
		œ̃	as œu in French <i>boeuf</i> , as ö in German <i>Hölle</i>

VOE]	as eu in French feu, as ö in German Höhle	w	as w in we and sway
oɪ	as oi in coin, as oy in destroy	y	as y in yard and young, in cue 'kyü\, mute 'myüt\, union 'yün-y&n\
p	as p in pepper and lip	ʔ	indicates that during the articulation of the sound represented by the preceding character, the front of the tongue has substantially the position it has for the articulation of the first sound of yard, as in French digne 'dEn[ʔy]
r	as r in red, car, and rarity	z	as z in zone, as se in raise
s	as s and ce in source, as ss in less	ʒ	as sɪ in vision; in azure 'a-zh&r\ (actually this is a single sound, not two); the 'z\ and the 'h\ are pronounced as two separate sounds when there is a hyphen between them, as in hogshead 'hogz-'hed, 'h&gz-
ʃ	as sh in shy, as ssɪ in mission, as ch in machine, as ci in special (actually this is a single sound, not two); the 's\ and the 'h\ are pronounced as separate sounds when there is a hyphen between them, as in grasshopper 'gras-'h&-p&r\	ˌ	slant line used in pairs to mark the beginning and end of a transcription: 'pen\
t	as t in tie, attack, latter, and later; as te in late	ˈ	mark preceding a syllable with primary (strongest) stress: 'pen-m&n-"ship\
θ	as th in thin and ether (actually this is a single sound, not two); the 't\ and the 'h\ are pronounced as separate sounds when there is a hyphen between them, as in knighthood 'nɪt-'hüd\	ˌ	mark preceding a syllable with secondary (medium) stress: 'pen-m&n-"ship\
ʒ	as th in then, either, and this (actually, this is a single sound, not two)	-	mark of syllable division
u	as u in rule, as ou in youth, in union 'yün-y&n\, in few 'fyü\	( )	indicate that what is symbolized between is present in some utterances but not in others: factory 'fak-t( )-rɪ\
ʊ	as u in pull, as oo in wood and book, in curable 'kyur-&-b&\ and fury 'fyur-E\	+	indicates that many regard as unacceptable the pronunciation variant immediately following the mark: cupola 'kyü-p&-l&, + -'tOl
ü	as ü in German füllen and hübsch		
ue	as ue in French rue, as üh in German fühlen		
v	as v in vivid, as ve in give		

As the Merriam Webster on-line dictionary explains, “Modern English ... displays no such consistency in sound and spelling, and so a dictionary of English must devote considerable attention to the pronunciation of the language. The English lexicon contains numerous eye rhymes such as love, move, and rove, words which do not sound alike despite their similar spellings. On the other hand, it also contains rhyming words such as breeze, cheese, ease, frieze, and sleaze whose rhymes are all spelled differently.”

One example dictionary showing the difference between letters and pronunciation symbols follows. Here, the word spelled “CAT,” is accompanied by the pronunciation symbols “kat.”

Entry:	CAT	← Letters
Pronunciation:	'kat	← Pronunciation Symbols
Function:	noun	
Definition:	l a : a carnivorous mammal (Felis catus) long domesticated as a pet and for catching rats and mice b : any of a family (Felidae) of carnivorous usually solitary and nocturnal mammals (as the domestic cat, lion, tiger, leopard, jaguar, cougar, wildcat, lynx, and cheetah)	

Languages with a gap between orthography and pronunciation are extremely difficult to learn as a second language, because the student may not rely on the spelling alone as a guide to pronunciation. Although pronunciation symbols exist, many students, particularly children, have difficulty memorizing these pronunciation symbols.

Thus, the present invention strives to teach a child to associate a pronunciation sound with a character icon, which is easier for the child to memorize. The present invention achieves this goal by assigning a name to the character icon, the name including the pronunciation sound. As the child learns to pronounce the character name, s/he also learns how to pronounce a specific pronunciation for a certain letter. Typically, a picture of the character icon is placed on a language learning device, next to a letter and a pronunciation symbol.

Since the terms “letter” and “pronunciation symbol” have distinct, well-established meanings, that are discussed in nearly every modern dictionary of English language, Applicant respectfully requests that the examiner withdraw the rejection of claims 1-6, 8-9, and 57-59 under 35 U.S.C. 112 based on the use of these terms in the claims.

Turning to the rejections under 35 U.S.C. 102/103, applicant requests that the terms “letter” and “pronunciation symbol” be interpreted with their plain meaning, described above, as well as any additional qualifications specifically recited in the claims.

Claim 1 has been amended to further point out the difference between pronunciation symbols and letters.

Claim 8 has been rewritten in independent form to include the limitations of claim 7, as suggested by the Examiner.

Claim 18 has also been rewritten in independent form to include the limitations of claim 7, as suggested by the Examiner.

In view of these amendments, applicant respectfully submits that claims 1-6, 8-9, 18, and 57-59 are in condition for allowance.

With regard to newly added claims 60-61, none of the prior art references show a language learning system that includes three or more selector substrates, each having five or more character regions containing a unique character icon and a letter, which in combination indicate a pronunciation for the letter as used in the name of the character icon, and further wherein the letters and pronunciations used in substrate 1 may be used to spell and pronounce each of the names of the characters on substrate 1, the letters and pronunciations used in substrates 1 and 2 may be used to spell and pronounce each of the names of the characters on substrate 2, and the letters and pronunciations used in substrates 1, 2, and 3 may be used to spell and pronounce each of the names of the characters on substrates 3.

Further, none of the prior art references show such a system in which a single letter with multiple possible pronunciations, such as "A" shown below, appears in several different locations on the selector substrates, paired with different character icons, to indicate different pronunciations of the letter. Therefore, claims 60 and 61 are believed

allowable.

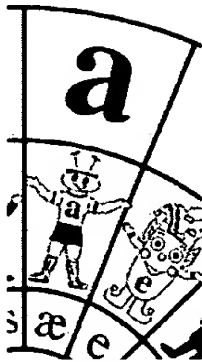


Fig. 3

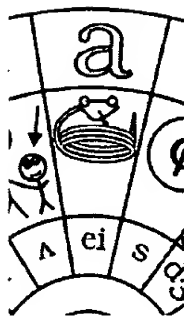


Fig. 6

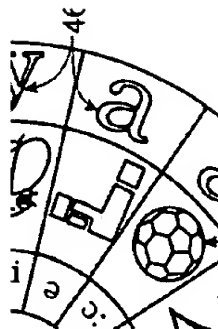


Fig. 6

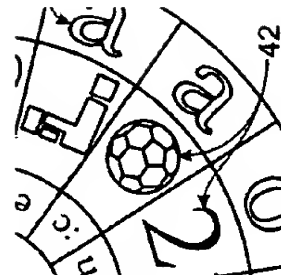


Fig. 6

As required by 37 C.F.R. § 1.121, applicants have provided a separate marked-up version of the amended claims showing the changes relative to the previous version of those claims (attached).

The above amendments and remarks are believed to address fully the Examiner's rejections, and place the application in condition for allowance. A prompt indication of the same respectfully is requested. The Examiner is encouraged to telephone the undersigned if any issues remain that may be resolved by a telephonic interview.

#### CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Commissioner for Patents, Washington, D.C. 20231, on February 12, 2003.

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Date of Signature: February 12, 2003

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PATENT TRADEMARK OFFICE

VERSION WITH MARKINGS TO SHOW CHANGES MADE

In the Claims:

Please amend claims 1, 8, and 18, as follows.

1. (Twice Amended) A language learning system, comprising:

a body;

a plurality of phoneme selectors coupled to the body, each phoneme selector including a letter, a character, and a pronunciation symbol separate from the letter, the pronunciation symbol indicating a pronunciation for the letter, all associated with a phoneme, the character having a name including the phoneme; and

a target window positioned in the body, the target window being configured to display a target;

wherein the plurality of selectors are configured to be adjustable by a user to spell a name of the target;

wherein the letter and pronunciation symbol are distinguished in that each letter may have a plurality of possible pronunciations when used in different words, but each pronunciation symbol has only one possible pronunciation[the pronunciation symbol instructs a user how to pronounce the letter as the letter is positioned in the name of the target].

8. (Once Amended) [The language learning system of claim 7,] A language learning system, comprising:

a set of characters, each character being associated with a predetermined phoneme of a language, and having a character name including the phoneme; and

a learning device configured to display at least one of the characters along with an associated letter and pronunciation symbol corresponding to the phoneme, wherein the pronunciation symbol is separate from the letter and instructs a user how to pronounce the letter as the letter is positioned in the name of each character;

wherein the learning device includes a wheel.

18. (Once Amended) [The language learning system of claim 7,] A language learning system, comprising:

a set of characters, each character being associated with a predetermined phoneme of a language, and having a character name including the phoneme; and

a learning device configured to display at least one of the characters along with an associated letter and pronunciation symbol corresponding to the phoneme, wherein the pronunciation symbol is separate from the letter and instructs a user how to pronounce the letter as the letter is positioned in the name of each character;

wherein the learning device includes a disk-shaped selector.

Please add the following new claims 60-61.

--60. A language learning system, comprising:

first, second, and third selector substrates, each selector substrate including five or more character regions, each character region including indicia showing a unique character icon and at least one letter from a name associated with the character icon, the character icon and letter forming a graphical unit that represents a single pronunciation of the letter as used in the character name, and that does not represent any other possible pronunciation of the letter;

wherein the first selector substrate contains all letters necessary to spell each of the character names of the character icons on the first selector substrate, and wherein the graphical units formed by the character icons and letters on the first selector substrate indicate all pronunciations necessary to correctly pronounce each of the character names on the first selector substrate;

wherein first and second selector substrates contain all letters necessary to spell each of the character names of the character icons on the second selector substrate, and wherein the graphical units formed by the character icons and letters on the first and second selector substrates indicate all pronunciations necessary to correctly pronounce each of the character names on the second selector substrate; and

wherein first, second, and third selector substrates contain all letters necessary to spell each of the character names of the character icons on the third selector substrate, and wherein the graphical units formed by the character icons and letters on the first, second and



third selector substrates indicate all pronunciations necessary to correctly pronounce each of the character names on the third selector substrate.

61. The language learning system of claim 60, wherein each letter that has only a single possible pronunciation is shown on the selector substrates to be paired with a single, unique character icon; and

wherein each letter that has more than one possible pronunciation appears in a plurality of character regions on the selector substrates, in each character region the letter being paired with a different character icon for each pronunciation; such that each letter paired with a unique character icon forms a graphical unit that represents a unique pronunciation of the letter.--